

## We CLAIM:

1. A method of improving the purity of an impure material comprising the steps of:

- 435 a) selecting a solution which comprises said impure material and a non-aqueous solvent;
- b) contacting said solution with an ion exchange resin or adsorbent so that said resin or adsorbent removes impurities from the impure material;
- 440 c) collecting solution after contact with said resin or adsorbent in step b); and
- d) removing said non-aqueous solvent from the solution collected in step c), thereby leaving a material of improved purity.

2. A method according to Claim 1, wherein said non-aqueous solvent is a halogenated hydrocarbon, ketone, alcohol, ether, hydrocarbon, ester, nitrile or a mixture thereof.

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3. A method according to Claim 1 or Claim 2, wherein said non-aqueous solvent is a fluorinated hydrocarbon solvent.

4. A method according to any preceding claim, wherein said non-aqueous solvent comprises tetrafluoroethane.

450 5. A method according to any preceding claim, wherein said non-aqueous solvent includes a fluorinated hydrocarbon solvent together with one or more co-solvents.

6. A method according to any preceding claim, which includes preparing a said solution comprising said impure material and a said non-aqueous solvent which comprises a fluorinated hydrocarbon solvent prior to step (b) and, subsequently, contacting the solution prepared with ion-exchange resin or adsorbent in step (b).

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7. A method according to any preceding claim, wherein said impure material comprises a naturally-occurring material, a material derived from a natural source or a synthetic material.

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8. A method according to any preceding claim, wherein said impure material comprises an extract from a botanical material.

9. A method according to any preceding claim, wherein said impure material comprises a nutraceutical or biologically active extract of a botanical material, a  
465 flavour or a fragrance.

10. A method according to any preceding claim, wherein the concentration of impure material to non-aqueous solvent in said solution described in step (a) is from 0.01% to 40% by weight of impure material.

11. A method according to any preceding claim, wherein the range of ratios of  
470 impure material to ion-exchange resin or adsorbent contacted in step (b) is 0.05 : 1 to 500 : 1 by weight.

12. A method for purifying nicotine comprising the steps of:

- (a) dissolving nicotine in a non-aqueous solvent to form a nicotine/non-aqueous solvent solution;
- 475 (b) passing said solution formed in step (a) through an ion-exchange resin or adsorbent to obtain a solution with reduced colour;
- (c) evaporating said non-aqueous solvent from said solution obtained in step (b) to obtain a low colour nicotine.

480 13. A method according to Claim 12, wherein said non-aqueous solvent is 1,1,1,2-tetrafluoroethane or a mixture of 1,1,1,2-tetrafluoroethane with a non-aqueous solvent selected from the group consisting of ketones, alcohols, ethers, hydrocarbons, esters or nitriles or mixtures thereof.